No.
16 17

Passed March 22d 1827
W. R. A.

An
Inaugural Dissertation
On
Hæmoptysis
By
Isaac Mitchell Price.

Hæmoptysis.

That disease is one of the greatest calamities which befalls man, is an irefutable fact which daily experience will abundantly confirm: it remains then with those who make the science of medicine the object of their research, to discover and point out, as far as posible, the remedies for all those diseases, which flesh is heir to.

In the practice of medicine we have no little uncertainty, and great difficulties to contend with, but the labours of our predecessors, remain as way-marks, to guide and instruct us.

It is well known that the practice of physick has varied in different ages and in different countries, and that new discoveries are continually unfolding more direct and safer paths, to the desired end.

Ever since the days of Æsculapius, to the present time, the march of knowledge has been

certain, steady and rapid.

How many thousands of the human race have been rescued from the grave by the discoveries of a Boerhaave, a Physick, or a Jenner; and a loathsome disease given place to a modification, as mild in its operation, as harmless in its effects. From these and numerous other instances, it may be inferred that though much has been done, there yet remains something to do.

The disease on which I am to write being one attaching organs so essential to life, it should be considered of the first importance.

I feel myself totally incompetent to additive any thing new on the subject which I have endeavoured to treat, though I hope I shall have performed all that is required of me.

By Haemoptysis, we understand a discharge of blood from the lungs, trachea, or fauces; but when it proceeds from the second or last, it is

not of so serious a nature, though sometimes a bleeding from the trachaa is not of little consequence.

We should always try to discover, whether the blood proceeds from the lungs or not; this, we can easily ascertain, for where there is a discharge from the trachaa or fauces, there are none of those febrile symptoms, pain or oppression at the breast, and there is no cough, but merely a hawking. If we look into the throat we can sometimes perceive it inflamed; but where it proceeds from the lungs, no such appearance is observable.

This disease is sometimes confounded with haematemesis, but if we attend to the symptoms of either disease, it is by no means difficult to distinguish them from each other; for in haematemesis, the blood is brought up by vomiting, is in larger quantities, and is generally of a darker

colour and grumous, being frequently mixed with the contents of the stomach; and here it is usually preceded by weight, pain, or anxiety in the region of that organ; likewise there is no cough, pain, or oppression at the breast. and the blood is frequently discharged by the bowels. In haematemesis, the pulse is more easily reduced than in hæmoptysis.

The appearance of the blood in the two diseases is very different, for in the one last mentioned it is florid and mixed with a frothy mucus.

Hæmoptysis is frequently the presage of a favourable termination in some diseases, such as pleurisies &c.

When it proves fatal at once (which is seldom the case) it is from some large vessel being ruptured.

Hæmoptysis is usually preceded by a saltish

in the mouth, a sense of weight about the praecordia and pain in some part of the thoray. Sometimes it is preceded by a sense of weight and oppression at the breast, a dry tickling cough, and difficulty of breathing: While at other times it comes on with shivering, coldness of the extremities, pains in the back and loins, flatulency, costiveness and lassitude.

causes. The principal causes of this disease, are sudden vicissitudes of heat and cold, it may be occasioned by violent exercise, as running, wrestling, jumping, lifting heavy weights; or by sudden bursts of laughter, singing or speaking very loud and blowing on wind instruments.

Dr Rush very seldom ever saw this disease in those persons who had been instructed early in vocal music. He also remarks that city watchmen, public cryers, lawyers and players

are less affected by the disease than persons of other occupations.

It generally happens to persons predisposed to consumption and in those of weak constitutions. Persons who have a delicate form, sanguineous temperament, narrow chest, prominent shoulders and long neck are particularly liable to hæmoptysis. What is worthy of remark is that it generally makes its appearance at night while the patient is asleep.

Besides the causes above enumerated, it is produced by wounds, blows, falls, intemperance, plethora, violent passion, and by the stoppage of some customary evacuation, such as the hæmorrhoidal or menstrual discharge. It may be produced by inflammation of the lungs, as in pleurisy, or it may happen accidentally without any known cause.

It is caused sometimes by a metastasis,

likewise by tubercles, here it is of a serious nature, and it frequently terminates in pulmonary consumption.

Treatment. Various astringent remedies have been employed in haimoptysis, but before any of them can be used advantageously, arterial action must be reduced; for this purpose, venesection should be had recourse to, and we must not be satisfied with taking away a small quantity of blood, but we should bleed untill we make a decided impression on the pulse.

Notwithstanding the authority of Dr Heberdon of London, who objects to the lancet, it is certainly one of the most efficacious means that can be employed for checking the flow of blood. We can never derive any advantage from astringents, where we have a hard, tense pulse; it is true we can

for the moment diminish arterial action by other means such as nauseating doses of tartar emetic or ipecacuanha which are very good remedies and will be spoken of in another place.

Sometimes topical bleeding with cups or leeches may become necessary, where the pulse will not bear general bleeding.

In the next place, should the bleeding continue the chloride of sodium should be given in the dose of from two to four drachms, every ten or fifteen minutes according to the urgency of the case. In the mean time we should use cold applications to different parts of the body, and particularly to the breast, armpits, scrotum and back of the neck.

Dr Darwin speaks of dashing cold water over the body of the patient, but of the consequence of such a practice I am wholly

unacquainted.

A highly useful remedy and one which should by no means be neglected is purging and the Glauber or Epsom salts or calomel are in general to be preferred to any other of the cathartic medicines.

The body of the patient has been immersed in cold water by some practitioners, but I think that would not be of much service unless it should be continued for a considerable length of time, which would be apt to prove hazardous to the patient.

In slight hamorrhagies of the lungs, and where it has become habitual, digitalis has been recommended by some writers; but it should by no means, (except in such instances as the above mentioned) take the place of the lancet, as it requires a much longer time to produce its effects.

The Sugar of Lead has for a long time been employed in haemoptysis, and when given in the dose of from one to two or three grains, combined with small quantities of opium, it has been found very efficacious in arresting the haemorhagy. It is best adapted to protracted cases, and should be repeated every hour or two hours, according as the cases demands it. Alum has also been recommended in haemoptysis and it is certainly one of the most powerful of the class of astringents. Opium has been considered an excellent remedy in some cases, there are other narcotics, such as the hyosciamus, and cicuta, but I should be inclined to think that the opium would be preferable as it answers best in doing away irritation which is of great importance frequently.

Throughout the whole course of the disease, the bowels should be kept open.

As I have detailed them, such are the remedies which are necessary for the removal of the active stage of hæmoptysis; but sometimes it degenerates into a hæmorrhagy of a weak excitement of the system, or it may assume that appearance from the first, and here we must pursue directly an opposite plan of treatment: For instead of depleting the system, we should use such remedies as are calculated to arouse and strengthen it. For this purpose tonics, such as the Peruvian bark, and chalybeates are to be used.

Here it is that the mineral acids are given with advantage, the best of which is the nitric. But in the more active form it must be recollected that the sulphuric is always

to be prefered.

The vegetable astringents such as the kino and catechu have been spoken of by some, but for my own part, I would prefer the preceding remedies. However if those that I have mentioned should fail of affording relief, they should certainly have a trial Exercise on horseback, or that of sailing or swinging should be employed, to assist the other remedies in strengthening the system. Malt liquors, such as porter and ale may be taken by the patient, and his diet should be light, but it should also be nourishing.

I have now given what I consider the best means of combating an attack of haemoptysis: but still there are other circumstances to be attended to. For where there is a predisposition to the disease, it is very

different parts of the body and particulary to the thoray. They should be considered as very important remedies and should by no means be neglected.

We may likewise employ sinapisms to the ankles and wrists, but they are not to be prefered to blisters.

In all cases of hæmorrhagy of the lungs, the patient should avoid speaking as much as possible, therefore all company except such as are absolutely necessary should be excluded.

He should be confined to bed with his shoulders elevated, the room should be kept cool and well ventilated. The drink should be small quantities of some acidulated draught. The best drinks for a patient in such a situation are lemonade, rice or barley water and others of a like nature.

Emetics have been used by some practitioners for the purpose of checking a discharge of blood from the lungs, but if they are given in such doses as to produce nausea, they are far more efficacious, and should never be overlooked. For this purpose the tartarized antimony may be given in the dose of the sixteenth or eighth of a grain, according to the effect it produces.

Ipecacuanha, also, given in nauseating doses is highly recommend by Dr Chapman. He gives it in the dose of two grains combined with half a grain of opium, to be repeated according to circumstances.

Nitre, in small and frequently repeated doses will be found useful in relieving fever.

Should the remedies which I have mentioned be found to be insufficient to stop the hæmorhagy, blisters should be applied to

apt to return; to guard against which, we should particularly attend to the state of the pulse.

Small bleedings should be had recourse to, when we perceive any oppression or pain at the breast, or when the pulse becomes too active.

The patient should by all means avoid any exposure to cold, for there is nothing so apt to produce a return of the disease, as a catarrh. Among the last remedies that we have in our power of curing hæmoptysis is a ptyalism: by this we may sometimes succeed in removing it. When it appears to be kept up by tubercles in the lungs, we can employ emetics with great advantage: in such a case of the disease, our chief reliance is to be placed in these medicines.

But if all these should fail in procuring

the patient a state of health, a seavoyage
or a removal to a warm climate should
be recommended.